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#### NOTICE OF ALLOWANCE AND FEE(S) DUE

27964 7590 HITT GAINES P.C. P.O. BOX 832570 RICHARDSON, TX 75083 03/04/2004

**EXAMINER** BOOTH, RICHARD A

ART UNIT

PAPER NUMBER

2812

DATE MAILED: 03/04/2004

1	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/038 734	12/31/2001	Seunamoo Choi	CHOI 30-10-5-4-13	3732

TITLE OF INVENTION: METHOD FOR FABRICATING MOS DEVICE WITH HALO IMPLANTED REGION

APPLN, TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	06/04/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

□ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

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			or <u>Fa</u>					
INSTRUCTIONS: This for appropriate. All further co- indicated unless corrected maintenance fee notification	orm should be used for transcrespondence including the below or directed otherwise us.	nsmitting the ISSU Patent, advance ord in Block 1, by (a)	E FEE and PU ders and notifica ) specifying a n	BLICATION FEE (if requation of maintenance fees ew correspondence address	nired). Blocks I through 4 s will be mailed to the current c; and/or (b) indicating a sep	should be completed where t correspondence address as arate "FEE ADDRESS" for		
CURRENT CORRESPONDEN	THEIR TRANSPORT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)				Note: A certificate of mailing can only be used for domestic mailings of th Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, mus have its own certificate of mailing or transmission.			
27964 7	590 03/04/2004			have its own certificat	te of mailing or transmission.			
HITT GAINES I P.O. BOX 832570 RICHARDSON, T		Ce I hereby certify that t States Postal Service addressed to the Ma transmitted to the USI	Certificate of Mailing or Transmission  I hereby certify that this Fee(s) Transmital is being deposited with the Unit States Postal Service with sufficient postage for first class mail in an enveloaddressed to the Mail Stop ISSUE FEE address above, or being facsim transmitted to the USPTO, on the date indicated below.					
						(Depositor's name)		
					(Signature			
						(Date)		
APPLICATION NO.	FILING DATE	1	FIRST NAMED IN	VENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/038,734	12/31/2001	l	Seungmoo		CHOI 30-10-5-4-13	3732		
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APPLN. TYPE	SMALL ENTITY	ISSUE FE	EE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE		
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CFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  agents OR, all firm (having a agent) and the				to 3 registered patent a lternatively, (2) the name as a member a registered to names of up to 2 registagents. If no name is liste	on the patent front page, list (1) the o 3 registered patent attorneys or rnatively, (2) the name of a single a member a registered attorney or names of up to 2 registered patent ents. If no name is listed, no name  3			
3. ASSIGNEE NAME AND	D RESIDENCE DATA TO E	BE PRINTED ON T	HE PATENT (p	rint or type)				
	s an assignee is identified be ed to the USPTO or is being	low, no assignee da submitted under sep	ata will appear of		ssignee data is only appropri T a substitute for filing an ass UNTRY)	iate when an assignment has signment.		
Please check the appropriate	e assignee category or catego	ories (will not be pri	inted on the pate	nt); 🛘 individual 🗖	corporation or other private g	roup entity 🔾 governmen		
4a. The following fee(s) are	enclosed:	4b.	. Payment of Fee	e(s):				
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Advance Order - # of	Copies		Deposit Accoun	is hereby authorized by c t Number	harge the required fee(s), or (enclose an extra	credit any overpayment, to copy of this form).		
Director for Patents is reque	ested to apply the Issue Fee a	nd Publication Fee	(if any) or to re-	apply any previously paid i	ssue fee to the application ide	entified above.		
(Authorized Signature)		(Date)						
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Inis collection of inform obtain or retain a benefit application. Confidentialit estimated to take 12 minu completed application for case. Any comments on suggestions for reducing Patent and Trademark 22313-1450. DO NOT 5 SEND TO: Commissioner	ation is required by 37 CFR by the public which is to f y is governed by 35 U.S.C. I tes to complete, including g m to the USPTO. Time with amount of time you this burden, should be sent Office, U.S. Department SEND FEES OR COMPLETOR PEES OR COMPLETOR Patents, Alexandria, Vir	1.311. The inform ille (and by the US) 122 and 37 CFR 1.1 athering, preparing, Il vary depending trequire to complet to the Chief Inform of Commerce, Al TED FORMS TO ginia 22313-1450.	nation is require. PTO to process: 4. This collectic, and submitting upon the individue this form an nation Officer, I lexandria, Virg THIS ADDRE	of to an n is the lural for the lural for J.S. inia				

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APPLICATION NO	. FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,734	1	2/31/2001	Seungmoo Choi	CHOI 30-10-5-4-13 3732	
27964	7590	03/04/2004		EXAMINER	
HITT GAIN	ES P.C.		BOOTH, RICHARD A		
P.O. BOX 832570 RICHARDSON, TX 75083		3		ART UNIT	PAPER NUMBER
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DATE MAILED: 03/04/2004

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

			<i>N</i>		
	Application No.	Applicant(s)			
AL 42 P. A.H 1-1124	10/038,734	CHOI ET AL.			
Notice of Allowability	Examiner	Art Unit			
	Richard A. Booth	2812			
The MAILING DATE of this communication apperatus being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOT the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communication IGHTS. This application is subject to	plication. If not includ n will be mailed in due	ed course. THIS		
1. X This communication is responsive to the appeal brief filed 2	<u>2/9/04</u> .				
2. X The allowed claim(s) is/are 15-19 and 21-30.					
3. The drawings filed on $\frac{12/3}{3}$ are accepted by the Examine	r.				
Acknowledgment is made of a claim for foreign priority un     a) ☐ All b) ☐ Some* c) ☐ None of the:     1. ☐ Certified copies of the priority documents have					
2. Certified copies of the priority documents have					
<ol><li>Copies of the certified copies of the priority do</li></ol>	cuments have been received in this	national stage applica	ation from the		
International Bureau (PCT Rule 17.2(a)).		•			
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	of this communication to file a reply IENT of this application.	complying with the re	quirements		
5. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give	itted. Note the attached EXAMINER es reason(s) why the oath or declara	'S AMENDMENT or Nation is deficient.	NOTICE OF		
6. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.				
(a) Including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO	-948) attached			
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	,				
(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date					
ldentifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	.84(c)) should be written on the drawi he header according to 37 CFR 1.121(	ngs in the front (not the d).	e back) of		
7. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATERIAL I FOR THE DEPOSIT OF BIOLOGIC	must be submitted. AL MATERIAL.	Note the		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of Informal F	Patent Application (PT	O-152)		
<ol> <li>Notice of References Cited (PTO-692)</li> <li>Dotice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>	6. ☐ Interview Summary		0-102)		
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0	Paper No./Mail Da	tè			
Paper No./Mail Date	8. ⊠ Examiner's Statem	ent of Researc for All	owance		
<ol> <li>Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol>		Richard A. Booth Primary Examiner Art Unit: 2812	owance		

Application/Control Number: 10/038,734

Art Unit: 2812

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: the prior art, either singly or in combination, fails to anticipate or render obvious, the limitations of: the halo implant having a depth profile under the gate structure which follows at a least a portion of the contour of the hard mask layer, as required by independent claim 15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard A. Booth whose telephone number is (571) 272-1668. The examiner can normally be reached on Monday-Thursday from 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on (571) 272-1679. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/038,734

Art Unit: 2812

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard A. Booth Primary Examiner Art Unit 2812 Page 3